0018

July 21, 1999

Ms. Pamela Grubaugh-Littig
Permit Supervisor
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Dear Ms. Grubaugh-Littig:

ACT/015/017 #6

I am enclosing for submittal the 2nd 1999 Engineering Inspection Reports for Cottonwood/Wilberg and Des Bee Dove Waste Rock Site and old Waste Rock Site. Also, the Deer Creek Waste Rock Site and Elk Canyon/Original Site are enclosed.

Sincerely,

John Christensen, P.E.
Sr. Construction Engineer

Encls.

cc J. Blake Webster

INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE #6 Copy #6			Page 1 of
Permit Number	ACT/015/017/ACT/015/019	**Report Date**	June 21, 1999
Mine Name	Cottonwood/Wilberg/Des-Bee-Dove/Trail Mountain		
Company Name	Energy West Mining Company		
Excess Spoil Pile or Refuse Pile Identification	**Pile Name**	Cottonwood Waste Rock Site	
	Pile Number		
	MSHA ID Number	1211-UT-09-01944-01	
Inspection Date	June 17, 1999		
Inspected By	John Christensen/Rick Cullum		
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	1999 Second Quarter Inspection		
	Attachments to Report? ☐ No ☐ Yes		

Field Evaluation

1. Foundation preparation, including the removal of all organic material and topsoil.

Foundation was prepared according to the approved plan.

2. Placement of underdrains and protective filter systems.

Not applicable.

3. Installation of final surface drainage systems.

The out slopes of the containment berms are at their final configuration and have been revegetated. The inlet ditch to the pond has been lined with rip rap and is extended as the pile changes elevation.

4. Placement and compaction of fill materials.

The refuse piles are leveled in lifts with trash and extraneous material sorted according to the permitted plan. The lift was leveled in may. The active lift is approximately 20% capacity. The containment area in the North end of the site was partially cleaned and spread throught out the pile to make room for the North pond cleaning. Some of the sediment from the Des-Bee-Dove pond cleaning remain in piles until the next berm construction.

5. Final grading and revegetation of fill.

The outslopes of each containment/lift berm have had final grading and vegetation completed.

INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE		Page 2 of

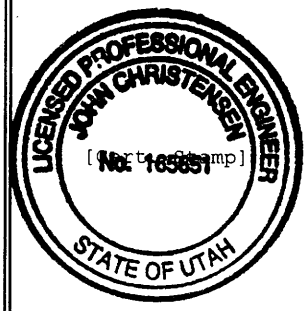
6. **Appearances of instability, structural weakness, and other hazardous conditions.**

The south face of the refuse pile shows no indication of weakness or instabilities.

7. **Other Comments. Describe any changes in the geometry of the Excess Spoil/Refuse Pile structure, instrumentation, average and maximum lifts of materials placed in the pile, elevations of active benches, total and remaining storage capacity of the structure, evidence of fires in the pile and abatement of such fires, volumes of materials placed in the structure during the year, and any other aspect of the structure affecting its stability or function which has occurred during the reporting period.**

The total storage capacity of the site is a 784,000 cubic yards. The elevation of the current lift varies with the required drainage slope. The surveyed elevation at the center of the active lift is 6,800.37 ft. The final design elevation will be 6,850 ft. The entire site is approximately 35% capacity. The estimated volume hauled to the site year to date as of June 1, 1999 was was 4987 cubic yards. The useable area of the present lift is approximately 20% full of refuse piles. Cottonwood North pond cleanings were placed in the containment area on the north end of the site.

Certification Statement



I hereby certify that; I am experienced in the construction of earth and rock fills; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of earth and rock fills in accordance with the certified and approved designs for this structure; that the fill structure has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

By: JOHN CHRISTENSEN, SR. CONST. ENG.
(Full Name and Title)

Signature: John Christensen **Date:** 7/8/99

P.E. Number & State: 165651 UT.

INSPECTION AND CERTIFIED REPORT ON EXCESS SPOIL PILE OR REFUSE PILE #6			Page 1 of
Permit Number	ACT/015/018	**Report Date**	June 21, 1999
Mine Name	Deer Creek		
Company Name	Energy West Mining Company		
Excess Spoil Pile or Refuse Pile Identification	**Pile Name**	Waste Rock Disposal Site	
	Pile Number		
	MSHA ID Number	1211-UT-09-00121-02	
Inspection Date	June 16, 1999		
Inspected By	John Christensen/Rick Cullum		
Reason for Inspection (Annual, Quarterly or Other Periodic Inspection, Critical Installation, or Completion of Construction)	1999 Second Quarter Inspection		
	Attachments to Report? ☐ No ☐ Yes		

Field Evaluation

1. **Foundation preparation, including the removal of all organic material and topsoil.**

All construction was done according to the permitted, professional engineered design specifications.

2. **Placement of underdrains and protective filter systems.**

An underdrain was installed when the site was constructed in 1989. the drain had a small amount of flow coming through it at the time of the inspection.

3. **Installation of final surface drainage systems.**

All interim slopes are maintained at their proper grade. The final slopes are surveyed to assure they are correct. Also the two final designed rip-rap ditches were installed as per the permitted plan and are extended as more lifts are added.

4. **Placement and compaction of fill materials.**

The site was leveled in November 1998, trash and extraneous material were removed. Lift was sampled as required. The active lift is at approximately 80% capacity.

5. **Final grading and revegetation of fill.**

See No. 3.

The sub-soil berm surrounding the site was seeded shortly after construction.

6. **Appearances of instability, structural weakness, and other hazardous conditions.**

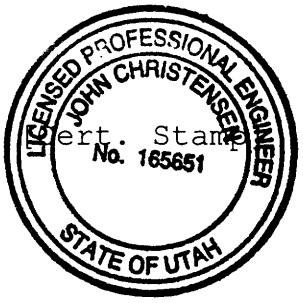
No weakness or instabilities are evident at this time.

7. Other Comments. Describe any changes in the geometry of the Excess Spoil/Refuse Pile structure, instrumentation, average and maximum lifts of materials placed in the pile, elevations of active benches, total and remaining storage capacity of the structure, evidence of fires in the pile and abatement of such fires, volumes of materials placed in the structure during the year, and any other aspect of the structure affecting its stability or function which has occurred during the reporting period.

The total storage capacity of the Area No. 1 cell is 460,000 cubic yards. The elevation of the current lift varies with the required drainage slope. The surveyed elevation at the center of the active lift is 6,350 ft. The final design elevation will be 6,369 ft. The Area No. 1 cell is approximately 36% capacity.

The estimated volume of material hauled in 1999 to the site was 3,674 cubic yards, as of June 1, 1999.

Certification Statement



Cert. Stamp

I hereby certify that; I am experienced in the construction of earth and rock fills; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of earth and rock fills in accordance with the certified and approved designs for this structure; that the fill structure has been maintained in accordance with approved design and meet or exceed the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

By: JOHN CHRISTENSEN, SR. CONST. ENG.
(Full Name and Title)

Signature: John Christensen Date: 7/8/99

P.E. Number & State: 165651, UT.